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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,629	03/21/2001	Antero Laine	30-543	4663

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EXAMINER

ALVO, MARC S

ART UNIT	PAPER NUMBER
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1731

1

DATE MAILED: 05/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/787.629

Examiner

Steve Alvo

Applicant(s)

LAINE ET AL

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4-25
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 20 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20 and 22-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s) _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other _____

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20, 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over LAAKSO in view of REINHALL '444 with or without GERVASI.

LAAKSO teaches an apparatus for treating pulp comprising an elongated casing (12) having plates at both ends, e.g. plate (68), the casing has a discharge conduit (65) and conduit going to pump (80), for the filtrate between the input and output end of the vessel. REINHALL '444 teaches dewatering pulp in vessel (10) and teaches that the pulp material and filtrate exiting the vessel can be controlled by valves (60) and (32) in response to the power shaft (44, 44') and the material entering the vessel can be controlled by valve (52). It would have been obvious to the routineer that the material into and out of the dewatering vessel of LAAKSO could have been controlled using valves in the manner taught by REINHALL '444, see REINHALL '444, column 3, lines 1-15. It would have been obvious that the rotating screw of LAAKSO that rotates close to the screen (78) would keep the screen clean. If this is not obvious then GERVASI teaches that a rotating screw can remove surplus material from the filter (screen). It would have been obvious from the teachings of GERVASI that the rotating screw of LAAKSO would keep surplus pulp from building up on the screen thereby keeping the filter surface clean. Claim 21 is rejected, as it would have been obvious to control the valves of LAAKSO based on impulse from a previous stage, e.g. the consistency, or the input power to the shaft as such is taught by REINHALL '444, e.g. 44→34.

Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over LAAKSO in view of REINHALL '444 with or without GERVASI as applied to claim 20 above, and further in view of WHITE et al.

WHITE et al teaches the alternativeness of having a screw supported by the screw helix to rotating shaft or to rod elements (Figure 18). It would have been obvious to space the helix of the screw of LAAKSO from the rotating shaft in the manner taught by WHITE. The actual spacing of the screw thread from the screen surface would have been an obvious design modification depending upon the type of pulp treated in the LAAKSO, e.g. the size of the pulp fibers and the consistency of the pulp slurry.

Claim 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over LAAKSO in view of REINHALL '444 with or without GERVASI and further in view WHITE et al as applied to claim 22 above, and further in view of REINHALL '221.

REINHALL '221 teaches dewatering pulp in a perforated screen having axial grooves. It would have been obvious that the perforated screen of LAAKSO could have axial grooves to dewater the pulp as taught by REINHALL '221. It would have been obvious to substitute the screen of REINHALL '221 for the screen of LAAKSO as they perform the same function of dewatering paper pulp.

Applicant's argument that the vessel of LAAKSO is used to deaerate the pulp, not to dewater the pulp is not convincing as the claimed structure does not differ from the structure of LAAKSO. The term "for discharging a thickened fiber suspension" is not a structural limitation. LAAKSO teaches the same structure claimed by Applicant, e.g. an elongated casing (12) having plates at both ends, e.g. plate (68), the casing has a discharge conduit (65) and conduit going to

pump (80) and drainer (66), for the filtrate between the input and output end of the vessel.

LAAKSO as Applicant removes excess liquid from the pulp with pumps (80) and (67).

Applicant's disclosed structure, as shown in instant Figure 2, does not differ from the structure of LAAKSO. LAAKSO would dewater to some extent as it removes liquid from the pulp through pumps (80) and (67).

The argument that LAKKSO uses pumps instead of valves is not convincing as REINHALL teaches a combination of pumps (48) and valves (52, 32, 60) for better control of the pulp treating apparatus. It would have been prima facie obvious to use the pump and valve control of REINHALL '444 instead of the pump control of LAAKS for the improved control taught by REINHALL '444.

The arguments with respect to GERVASI are not convincing as only being used to show that the rotating screw of LAAKSO would keep surplus pulp from building up on the screen thereby keeping the filter surface clean.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

When filing an "**Official**" FAX in Group 1730, please indicate in the Header (upper right) "**Official**" for papers that are to be entered into the file. The "**Official**" FAX phone numbers for this TC 1700 are:

Non-Final Fax: (703) 872-9310 **After-Final FAX:** (703) 872-9311.

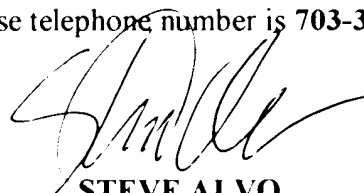
When filing an "**Unofficial**" FAX in Group 1730, please indicate in the Header (upper right) "**Unofficial**" for Draft Documents and other Communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers. The "**Unofficial**" FAX phone number for this Art Unit (1731) is (703) 305-7115.

Any inquiry concerning this communication or earlier communications from the **primary examiner** should be directed to **Steve Alvo** whose telephone number is (703) 308-2048. The Examiner can normally be reached on Monday - Friday from **6:00 AM - 2:30 PM (EST)**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Steve Griffin, can be reached on 703-308-1164.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Group receptionist** whose telephone number is 703-308-0661.

MSA
5/12/2003



STEVE ALVO
PRIMARY EXAMINER
ART UNIT 1731